Therefore, the present and past investigations (5, 6) do not appear to be in contrast and future studies may benefit from taking these considerations into account: growth timing and growth amount are two distinct concepts.

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European Journal of Orthodontics, 2016, 112
doi:10.1093/ejo/cjv055
Advance Access publication 22 October 2015

Cervical vertebrae maturation method and craniofacial growth

Piotr Fudalej*,**, Nikolaos Pandis* and Christos Katsaros*

*Department of Orthodontics and Dentofacial Orthopedics, University of Bern, Bern, Switzerland and **Department of Orthodontics, Palacky University Olomouc, Olomouc, Czech Republic

Dear Sir,

We would like to thank Drs. Perinetti, Primozic, Franchi, and Contardo for their comments regarding our study titled 'The cervical vertebrae maturation (CVM) method cannot predict craniofacial growth in girls with Class II malocclusion' (1).

In our study we concentrated on the potential associations between mandibular growth and CVM grading adjusted for age. To this effect we collected a homogenous group of girls (we did not include boys because the Nijmegen Growth Study from which the sample was derived, had been terminated at the age of 14—too early for most boys to complete growth spurt) who had Class II malocclusion and were followed *semi-annually*. The availability of cephalograms taken twice a year allowed to identify the amount of growth changes during 6-month periods. We found that the only significant predictor for the remaining mandibular growth was age and not CVM in our sample. To avoid misunderstandings, this was made now clear also in the abstract of the printed paper.

We agree that the CVM score is drawn on an ordinal scale, however, after calculating the average across raters the data followed a distribution close to normal and therefore we felt that it was reasonable to present means and standard deviations; the mixed model did not produce R^2 and this is often the case with those models as R^2 in this scenario does not necessarily have the same interpretation with the R^2 produced when fitting an unconditional linear regression model; we agree that growth does not necessarily follow a linear pattern. We *did* fit a mixed model, which allowed both the intercepts and the slopes to vary. In addition a quadratic term was considered. After running appropriate post-estimation routines and calculating predicted values the most parsimonious and most easily interpretable mixed model was presented.

The authors brought attention to a relatively low reproducibility of the CVM grade assignment in our study and suggested 'repeatability the authors obtained was perhaps too low to make results reliable'. We consider that the repeatability of the CVM grading is problematic but this limitation of the CVM method has also been found by others (2–5) and seems to be bound with the method rather than with our raters.

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